Experts on Speaking Terms with Public Policy-makers. A case study on the IJssel-Vecht delta.

Gorter, C.; Nijkamp, P.

1999

document version
Early version, also known as pre-print

EXPERTS ON SPEAKING TERMS WITH PUBLIC POLICY-MAKERS
A CASE STUDY ON THE IJSSEL-VECHT DELTA

Cees Gorter
Peter Nijkamp

Research Memorandum 1999 - 6

vrije Universiteit *amsterdam*

EXPERTS ON SPEAKING TERMS WITH PUBLIC POLICY-MAKERS
A CASE STUDY ON THE IJSSEL-VECHT DELTA

Cees Gorter Peter Nijkarnp

Abstract

This paper seeks to develop a new interactive approach which will facilitate the communication process between experts and regional stakeholders, by using a sound methodology and the opportunities offered by Internet. The application centers around one of the regions in the eastern part of The Netherlands. It is demonstrated that this approach is useful for consensus building regarding creative policy solutions.

*The authors wish to thank Sonja Smit, Barry Ubbels and Ron Vreeker for their assistance in carrying out the research.

pn740

1. The Region as a Policy Focus

In recent years we have witnessed a heightened interest in the region as a focal point of innovation policy (see van Geenhuizen and Nijkamp 1998; Ratti et al. 1997). The region is increasingly conceived of as a dynamic, promising and self-organizing spatial unit which is able to achieve a competitive position in an open international networked economy through creative design, proper land use policy and management of human resources. The region has become the creation of a portfolio of locational opportunities (cf Cheshire and Gordon 1995 and Davelaar 199 1).

It is also increasingly recognized that the region will not be able to pave a road towards the future through a process of top-down blueprint planning. Rather, we know that a learning process instigated by the effective use of tacit knowledge on uncertainty reduction is a sine qua non for competitive survival strategies (cf. Nijkamp and Reggiani 1998). Thus, the use of the regional knowledge capability is a critical success factor for regional development. The exploitation of this capability presupposes the fulfillment of the following conditions:

- consensus among regional stakeholders
- networking in order to advance information diffusion and knowledge creation
- channels for the transformation of knowledge
- management and development of human capital and of stocks of knowledge.

Efficient regional development policy is thus based on synergetic use of all constituents of a regional knowledge base (Knight 1995 and Storper 1995). Clearly. institutional support is of critical importance here, as it is through a business-oriented, flexible institutional backing that a region can reach a competitive edge. Therefore. the interface of the public sector and the private sector is at stake in generating and exploiting the set of locational opportunities (cf. Allen 1998). This self-organizing power of the region has to be reinforced through an effective and qualified contribution from the research and development sector, in which scientific knowledge plays a crucial role. Here the role of the scientific expert is of utmost importance, as he is the liaison between policy-making bodies and business representatives (cf. Florida 1995; Morgan 1997).

The question addressed in the present paper: what is the role of the expert in regional decision-making ? After the requiem for top-down blueprint planning and with the emergence of self-organizing and learning principles for the region, there is a need for revisiting the role of planners and experts in regional development policy. In our paper we will emphasize the positive role of the expert in a regional planning process with many stakeholders, provided he is able to develop sophisticated tools and to create new knowledge which may stimulate innovative thinking and advance consensus building among all actors involved. In the present paper we will center our arguments around an

empirical case study, viz. the IJssel-Vecht Delta (IJVD) in the province of Overijssel in The Netherlands.

This paper is organized as follows. Section 2 will concisely introduce some elements related to competitiveness strategies of regions, followed by an analysis of the strong and weak parts of the IJVD area (Section 3). Next in Section 4 various regional development strategies for this area are mapped out, which by means of an interactive internet session among stakeholders - using a cascade model - are synthesized into four major distinct clusters of policy orientation (Section 5). Section 6 is then devoted to the identification of promising policy actions, while the paper is concluded with a discussion on consensus seeking and implementation issues.

2. Competitive Regional Conditions

The notion of competitiveness does not stem from economics (which is more concerned with efficiency), but from business administration (see also Porter 1990). Competitiveness refers to industrial behaviour which aims to do things different and at least better than other actors on the market, by not only using economic efficiency principles (related e.g. to factor inputs, market strategies etc.), but also network strategies which through a blend of cooperation and competition may lead to innovative behaviour which generates comparative cost advantages in terms of efficiency advantages in the private sector, good governance, Schumpeterian regional entrepreneurship and favourable local/regional conditions for international business life. In many cases competitive behaviour may be based on an exploitation of the spatial-economic synergy in the nodes of a spatial (e.g. transportation or telecommunication) network or of an industrial network. Such nodal points offer usually a more effective regional governance, a structural commitment among stakeholders and a pro-active policy response. This is particularly important if such a policy builds on historical strength, favourable geographical conditions, the use of indigenous resources and dedicated public and citizen's support.

Regional policy nowadays has to find a balance between an efficient use of scarce resources, a socially acceptable level of regional disparities and an environmentally-benign and sustainable use of the region's ecology. There has been a long debate on the various dilemma's involved (see Armstrong and Taylor 1993).

Based on a simple neo-classical growth model, it can easily be demonstrated that convergence between regions in terms of output per capita will arise as a result of declining output of capital, a phenomenon which may be ascribed to declining revenues of capital accumulation. This situation would mean that in the long run the 'forerunners' will lose their comparative advantage and the 'backrunners' will sooner or later catch up their delay. In the economics literature the convergence theory has extensively been discussed; it has led to adjusted concepts such as absolute versus conditional convergence, or beta convergence versus delta convergence.

The empirical facts on convergence are not conclusive. There are several cases where within a country convergence has occurred, but there are also cases where persistent welfare differences continue to exist. For instance, in the EU 15 the maximum difference in terms of GDP per head amounts to a factor 6.

In recent publications on regional growth differences, much attention has been given to the effects of globalization which position regions in an international force field with many opportunities, but also with many problematic outcomes for vulnerable regional economies (see also Kohno et al. 1998).

The strategic question now is how the regions of the world are faring under these far-reaching global changes. It is hard to find regional islands of stability amidst the global turbulence. Some regions (e.g., California, Ile-de-France, Bavaria, Randstad Holland) have become "world regions" with a far reaching impact on the world economy as a whole. Others have become important specialized areas providing services or manufacturing to a significant part of our world (e.g., Third Italy, the Greater London area, Silicon Valley, Tokyo Metropolitan area). And yet others have become the losers in the new competitive world economy (e.g., regions in Central and Eastern Europe, Greece, parts of Latin America). And finally, there are also peripheral regions, which due to historical or ecological advantages are booming as a result of global tourism flows (e.g., the Greek islands and the Turkish coast, the Caribbean, northern Queensland). Virtually all regions in the world seem to be in a state of transition as a result of global forces (economic, geopolitical, cultural, demographic).

The influence of public policy on the society and the regional and national economy has drastically increased since 1945. As a result, government expenditures have significantly risen (absolutely and relatively), while also much more regulatory measures have been introduced. Social security systems were, for example. largely expanded, while the government assumed inter alia responsibility for the financing and operation of transport infrastructure. In the 1980s however, the societal and institutional environment in which economic agents were used to act has changed dramatically. This holds for the public as well as the private sector: the devolution movement has induced an increased competition between companies and countries. The new institutional model which has arisen is a blend of competition and cooperation between actors or stakeholders. The connecting constellation is mostly made up by network configurations, with key players in the nodes of such a network. It is increasingly recognized that a network model may be an efficient tool for competition and strategic policy.

As mentioned in Section 1, we observe nowadays a clear trend toward a cooperative, self-organizing and self-reliant regional policy constellation in which all stakeholders are involved in a concerted action strategy and in which these stakeholders aim to achieve uncertainty reduction through the development of networked learning strategies. Seen from this perspective we will offer now some background information of the region under investigation, the IJVD region.

3. Regional Strengths and Weaknesses of the IJssel-Vecht Delta

The province of Overijssel is traditionally a peripheral region in The Netherlands. The western delta-area is the IJVD area which is the subject of our paper. The recent spatial-economic development of the IJVD region has in recent periods been quite favourable. During the period 1992-96, the potential labour force has grown considerably (with about 3% per year; see Figure 3. 1), largely due to autonomous growth of the population at working age (net immigration has been slightly positive in recent years also).

This growth of labour supply could be accommodated in the regional labour market and hence. it did not lead to higher unemployment. On the contrary. unemployment has even fallen down to less than 5% in 1996 (and became below 4% in 1997). The urban unemployment rate in the region, that is unemployment in the city of Zwolle, is also relatively low: about 7% in 1997, whereas the average for large urban areas (more than 100.000 inhabitants) in the Netherlands is 11%. The urban centre Zwolle has also performed relatively well in the past decades as revealed by the high (annual) growth rate of urban production during 1970-1995 (see Figure 3.2). In this respect, it is noteworthy that roughly one-third of total regional population lives in the urban core of the region (Zwolle).

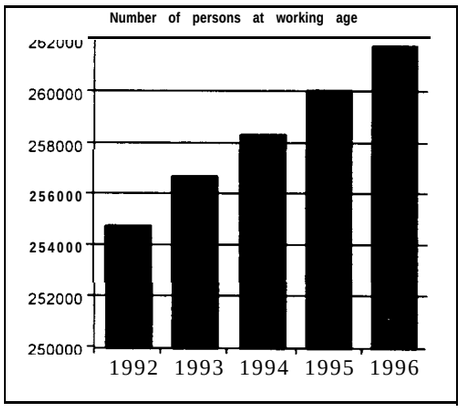


Figure 3.1 Growth of the potential labour force in the IJssel-Vecht Delta (1992- 1996)

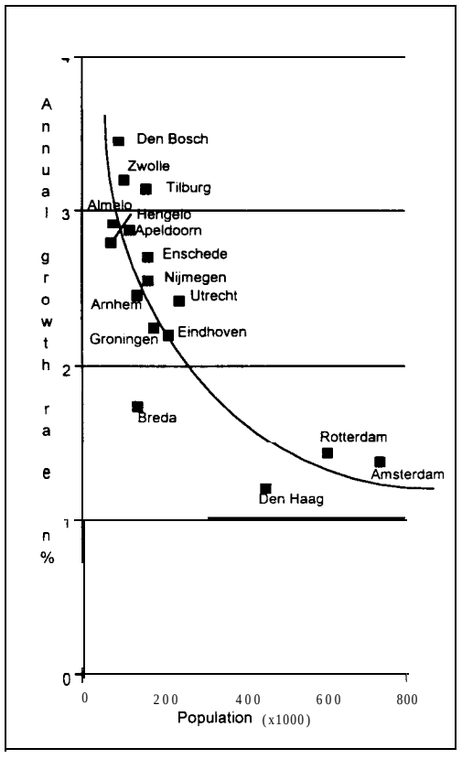


Figure 3.2 Average annual growth rate of urban production volume and population size of large cities in the Netherlands (1970- 1995); Source: SEO (1996)

In recent years, it can be observed that the growth in GRP (Gross Regional Product) is above the national average. In particular, firms of small and medium size, located in both urban and rural areas, have been responsible for this regional performance. The region also has a good reputation in the field of ""human resources" due to active entrepreneurship, high rates of self-employment and a good working attitude. Moreover, a large spectrum of educational facilities are offered at the medium and higher vocational level in the urban core (Zwolle), which contributes to a favourable business climate of the region.

As regards to the spatial dynamics of firms, it is found that most of the firm movements are relocations within the region (or even within the same municipality: see Chamber of Commerce, 1997). The inflow of new firms from outside the region is remarkably low, despite the general trend in the Netherlands of migration from the core (Randstad) area (see Kemper and Pellenbarg, 1995). The net balance of in- and outflow of firms at the provincial level is presented in Table 3.1.

Net migration Period:	Total	Wholesale trade	Commercial Services	Industrial sector
1988-1989	-35	2	-29	-8
1990-1991	8	2	14	-8
1992-1993	10	9	-7	8
1994- 1995	3	8	-7	2

Table 3.1 Net migration of firms from other provinces into the province of Overijssel [in absolute numbers; source: Kemper and Pellenbarg, 1991, 1993,1995 and 1997]

Clearly, the numbers show that the gain of firms through relocation is modest (this happens to be much larger in the provinces located in the South-eastern part of the Netherlands, Noord Brabant and Gelderland; see also Kemper and Pellenbarg, 1995).

The sectoral composition of the regional economy has remained largely unchanged in the last decade, and reflects a somewhat traditional orientation of economic activities in agricultural and industrial sectors. Besides the agricultural sector, we also observe that the share of the industry, trade, construction and transport sector in total regional employment is clearly higher than the national average, whereas the opposite holds for the (commercial) service sector (which also shows substantial lower employment growth rates in the region than the national average). Another consequential characteristic of the firms located in the IJssel-Vecht Delta is that many of them are subsidiaries of which the headquater is located in the Randstad or abroad (this also implies that decision-making on production activities is taking place outside of the region).

The geographical position of the region has been proven in the past to be of critical importance for the economic development of the region (see e.g. Kutsch Lojenga and Nijkamp. 1978). Nowadays. this particular location of the region, in-between the economic core (Randstad) and the economic periphery (northern parts of the Netherlands) will probably be of even greater significance. The multimodal urban centre (Zwolle) is an major node in the road- and rail-network of economic centres in the Netherlands. Moreover, transport over water in (south)-eastern direction through the region can also be accommodated by the nearby Zwolle located harbour facilities of Kampen. This makes that the Zwolle-Kampen combination can be regarded as being the “link” between the Randstad and the North-East of the Netherlands (especially, the road-corridor A28 is crucial in this respect). For this reason, the IJssel-Vecht Delta appears to be increasingly attractive to locate transport and distribution activities (for example, regional distribution centra). This economic function of the region to link the core (West) and periphery (North-East) of the Netherlands may become much more important in the coming decades because of the economic developments in European perspective which will likely lead to more economic integration between the West and the (North)-East of Europe. To put it differently, future economic developments in the Northern part of the Netherlands are likely to have positive

effects for the IJssel-Vecht Delta, given its nodal function in the transport network. At a more detailed spatial level, the nature of the IJssel-Vecht Delta as a border-region of Germany will give rise to intensified cross-border economic activities (via the road and across the water). In particular, the urban corridor in the eastward direction (North-Overijssel tied with South-Drenthe via the cities of Zwolle, Meppel, Hoogeveen, and Emmen) may prove to become a vital connection with Germany.

To conclude, the spatial-economic structure of the IJssel-Vecht Delta has the following favourable locational opportunities:

(1) a potentially prosperous industrial base (in particular, small and medium sized firms),
(2) the availability of human resources (active entrepreneurship, working moral),
(3) the geographical location (link between the Dutch economic core and periphery).

It will be this set of regional "opportunities" which can be used as the building blocks to create an effective regional-economic development strategy that searches for comparative advantages and exploits the economic "opportunities" such that the results will be in harmony with the goals set by the regional policy-makers.

However, the regional-economic prospects of the IJssel-Vecht Delta is not without problems. In particular, the following two issues, in addition to the well-known dilemma of sustainability of the environment versus economic (industrial) development, can be considered as a threat to future growth of the regional economy:

(1) the economic decline of rural areas in the region (which are mainly agriculturally-oriented and have a clear need to be restructured given the shrinking of the agricultural sector in the Netherlands),
(2) a lack of complementarity between the economic activities in the urban core and the rural areas in the region.

This means that the development strategy for the region actions have to be undertaken to create opportunities for rural areas and - on top of that - to integrate the rural economic activities with the economic centre of the region (city of Zwolle).

4. Regional Development Strategies for the IJssel-Vecht Delta

It has been argued in section 2 that regional economic development is activated through the activation of competitiveness in the private sector (thereby enhancing efficiency of firms in the private sector) and cooperation between actors and stakeholders in the public sector (stimulating efficiency among regional authorities).

Clearly, the regional (and national) authorities have several reasons to intervene in the process of regional development. First, the growth of the private sector has to be encouraged by triggering positive external effects, like establishing an attractive business climate in the IJssel-Vecht Delta via, for example, investments in road infrastructure (to build new roads and/or to improve the current network), and refining public relations. General grounds to interfere in regional development are related to market failures due to

imperfect competition, imperfect information, and the absence of markets, but this kind of policy action is under control of the national government in the Netherlands. Last but not least, the equity issue has to be considered by regional authorities to do "justice" to distinct intra-regional differences in economic performance. In case of the IJssel-Vecht Delta this leads public policy-makers to aim at complementarity between urban and rural economies (so that rural areas will not lag ▪ too much ▪ behind the development of the urban core).

For the outset of an effective regional development strategy for the IJVD region that strengthens regional competitiveness, it is useful to distinguish three strategic levels:

(1) *Economic geography.*

Clearly, the spatial configuration of the region has consequences for its economic functioning. A classic example of this concerns the "growth pole" concept in which a particular area of the region has comparative advantages and grows at an increasing rate; the idea of cumulative causation that might spring off in the urban core of the region (city of Zwolle). Another geographical phenomenon that might play a crucial role in the spatial economic development is the existence of a spatial economic corridor that connects economic centres in a region (nation). For the IJVD area, a promising candidate is the road-corridor A28 that connects the west with the north-(east) of the Netherlands. More in general. the spatial-economic network of the region determines the economic interactions with other cities in a national (international) context. The international dimension is relevant for the IJVD region, given its border-location to Germany.

(2) *Industrial development*

Recent insights (see also section 2) emphasize regional self-reliance (using a bottom-up approach). active and self-conscious involvement of the region and its actors, and the regional production-milieu as critical factors for economic development. So, economic development heavily depends on regional "pride" of incumbent firms, and this entrepreneurial spirit is detectable for the IJVD region in the SME's (Small and Medium sized Enterprises). Moreover, the network configuration between industries (via communication channels, personal relationships, geographical proximity, and regional ties) can be regarded as a potential force in the IJVD region, but is not utilised fully yet. A complementary force could be the influx of (large) firms from other regions, but this is not (yet) a major occurrence in the IJVD region.

(3) *Firm behaviour towards innovativeness and business initiatives*

Empirical research on regional innovativeness has put forward the importance of SME's, see for example Kleinknecht, 1966). This finding definitely applies to the IJVD in which the SME's have the potential to trigger this process of continuous innovation, whereas large firms with major Research and Development centre are almost absent in the region.

The above-mentioned strategic concepts, and their connotations for the IJssel-Vecht Delta are used, together with the SWOT-analysis presented in section 2, to develop a strategy that can get the region on an accelerated economic growth path. To avoid the making of a "blue-print" proclamation of the experts, the further creation of the development strategy is based on consensus building in which all stakeholders are involved.

More specifically, an interactive learning and communication process is initiated in which alternative strategies of regional development are introduced, evaluated and selected. This "road to consensus" will be discussed in detail in the subsequent sections.

5. The Cascade Model

In this section, we briefly describe the creation of (four) regional development strategies for the IJssel-Vecht Delta, while next the four clusters of policy orientation with respect to regional economic development will be analysed by using a so-called cascade model in which the development path (or trajectory) from the current to the new economic profile of the region will be sketched. The functioning of the cascade-model with its four potential spatial-economic development trajectories for the IJssel-Vecht region will be interactively debated with the policy-makers in the region.

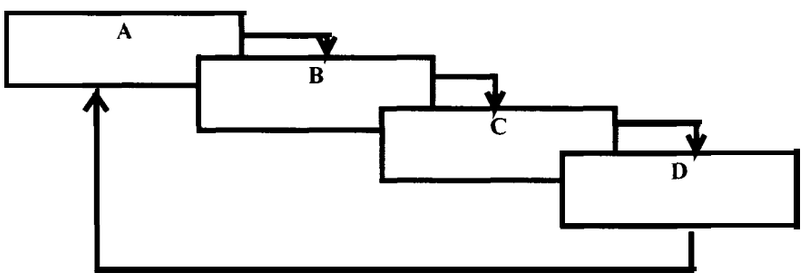
Before doing so, we introduce the spatial-economic components of the various developments paths. These components are partly put forward by a group of "stakeholders" in the region which have been consulted to give their expert-opinion on (i) the strengths and weaknesses of the regional economy, and (ii) the driving forces and potential barriers in the spatial-economic development of the region. This subjective information is integrated with our objective analysis of the economic perspectives of the region (see Section 3) and the regional development strategies for the IJVD (see Section 4). The fundamental elements that come to the fore are as follows. Industrial development in the region is basically triggered by the incumbent firms (in particular small and medium sized companies play a dominant role), and not so much due to firm entries from outside the region. To further increase this *internal* potential of the SME's in industrial sectors (e.g.. the metal. carpet and synthetic sectors in the process industry), networks have to be created at a much larger scaler than is currently the case in the region. Favourable economic perspectives are also expected to arise from the road-corridor (A28) that connects the central (western) parts with the north of the Netherlands. Transport and distribution activities may find it attractive to locate - at particular geographically concentrated industrial sites - along the corridor. From a spatial perspective, the region clearly faces a great dilemma. On the one hand spatial concentration in the urban core is helpful to achieve economics of scale (giving the opportunities to offer for example (specialized) health and education facilities in the region) and spin-offs between economic sectors (e.g. this might lead to the entrance of the headquarters of companies). On the other hand, spatial deconcentration of economic activities, tendering smaller towns and villages the chance to development economically to some extent, is demanded since these places carry the burden of decline in the agricultural sector and face the risk of selective outmigration of youngsters. An additional issue that plays a crucial role in this debate on spatial planning in the region is related to the regional housing market: regulations set at the provincial or national level make it difficult for smaller municipalities to expand housing supply and hence, local demand can not fulfilled and leads to even further (selective) outmigration.

The result of this blend of expert-consultation and objective analysis is that four potential spatial-economic development trajectories are constructed to enhance regional competitiveness. As mentioned before, the basic concepts of regional development strategies (economic geography, industrial development, and firm behaviour) are integrated into the proposed development paths for the IJssel-Vecht Delta. In Table 5.1, the four candidates are summarized.

Spatial planning Economic development	Concentration in a hierarchical structure (growth pole-concept)	Concentration and deconcentration in a non-hierarchical structure
Industrial Clustering	I: to "direct" endogenous industrial forces	II: to "release" endogenous industrial forces
Development of node(s) along Corridor A-28	III: to "corridor once"	IV: to "corridor twice"

Table 5.1 Four potential spatial-economic developments paths for the IJssel-Vecht Delta.

It is interesting to note that, from a spatial planning perspective, option I and III are build on a top-down approach (in a hierarchical structure of planning), whereas option II and IV advocate a bottom-up approach to stimulate regional development. Economic development in the region is considered to be most effective when the key "assets" of the region (industrial base, corridor) are exploited in an appropriate way. To demonstrate the differences between the four options, use is made of the cascade model (see Figure 5.1) in which for each option the path from current profile (A) to the new profile (D) will be outlined by identifying ***and*** exposing regional impulses (B) and their effects (C).



A: Current regional-economic profile
B: Regional-economic impulses
C: Regional-economic effects
D: New regional-economic profile

Figure 5.1 The cascade model

To consider the four development paths in detail, spatial-economic impulses and their effects on the region are made explicit and visually presented' to the public-policy makers in the region to open the debate on the optimal path of development. Moreover, those who it concern are also able to inspect the actual working of this cascade-model via Internet, and are invited to respond on the feasibility and desirability of the various development paths via electronic mail.

Here, we condense the bulk of information offered to the public policy-makers by presenting the essential parts of the impulses and their effects in Table 5.2 (options I and II, focusing on the regional industrial base) and Table 5.3 (options III and IV concentrating on the economic function of the main road-corridor A28 in the region).

Development path:	IMPULSES	EFFECTS
To direct endogenous industrial forces (I)	Modemising traditional process industries (like metal, carpet, synthetic sectors) Creation of industrial networks in urban core to stimulate innovativeness in the region Emphasis on urban core in general, supportive role for larger towns Centralised development of industrial sites (supply-driven approach)	Industrial growth in urban core (urban employment growth) Modest growth commercial services in urban core Modest growth of firm entries from outside the region Congestion in urban core Hardly any spin-offs for the rest of the region (rural areas)
To release endogenous industrial forces (II)	Modemising traditional process industries (like metal. carpet, synthetic sectors) Creation of industrial networks throughout the region to stimulate innovativeness Emphasis on decentralisation, but maintaining vital role for urban core of the region Market-oriented development of industrial sites (demand-driven approach)	Mutual spin-offs between urban and rural parts of the region Industrial growth in the region (regional employment growth) Economic vitality of small sized towns and villages Increase in transport flows (negative environmental side-effects)

Table 5.2 Overview of cascade-model for potential development strategies I and II.

[1] For example, the spatial implications of impulses are made visible by maps of the region, together with detailed information on sectoral shifts in the regional economy.

In the view of the policy-makers, the top-down approach of spatial planning is in line with current regulation and practise (options I and III), whereas the bottom-up approach of spatial planning implies a reconsideration and possible a redesign of the current policy system (options II and IV). The outcome of this interactive communication and consensus building process with the public-policy makers will be the subject of the next section.

Development path:	IMPULSES	EFFECTS
To corridor once (III)	Stimulate transport and distribution activities in urban core along the corridor	Growth of indigenous transport-and distribution sector in urban core
	Centralised development of industrial sites (supply-driven approach)	Settlement of new firms in transport and distribution sector
	Support of commercial services (in urban core), linked to the transport sector	(Modest) growth in industrial and service sectors in urban centre
	Favour harbour development (in main harbour town, Kampen)	Hardly any spin-offs for the rest of the region (rural areas)
	Combat of congestion on road-corridor (A-28)	
To corridor twice (IV)	Stimulate transport and distribution activities at more than one exclusive site along the corridor	Growth of indigenous transport-and distribution sector and settlement of new firms in transport and distribution sector (at sites along the corridor)
	Market-oriented development of industrial sites (demand-driven approach). allowing for endogenous growth of (local) industries	(Modest) growth in industrial sector in areas surrounding the road-corridor, (modest) growth of service-sector in urban core
	Favour harbour development in the harbour towns and construct water-transport facilities in the region	Spin-offs for the region (areas around the road-corridor)
	Combat of congestion on road-corridor (A-28)	

'able 5.3 Overview of cascade-model for potential development strategies III and I\

6. Synthesis of Spatial Development Strategy for the IJssel-Vecht Delta

The confrontation of public policy-makers with the consequences of the development paths described in the previous section has put forward that the future regional structure of the IJssel-Vecht Delta is expected to be build on:

(1) the urban core area., offering mulimodal transport and distribution facilities (road- and rail transport via Zwolle, and water-transport via Kampen-Zwolle),

(2) the road-corridor (A28) along which - at particular places - vital industrial sites can be developed,

(3) the industrial cluster of regional firms, in particular centred around innovative-oriented sectors like the metal, carpet and synthetic industries.

Another important result of the consensus-seeking process is that the regional economy can benefit from spin-offs of economic activities in the urban centre to rural parts (towns, villages) in the region, and vice **versa.** The latter observation has far-reaching consequences for the future design and implementation of spatial planning in the region. To allow for continuous and reinforcing economic interaction between the various places (cities, villages) in the region, scope for growth is required for both larger and smaller places. This would imply that the current "static" line of spatial planning (i.e., a highly rigid and regulated system) in which some cities may grow and others may not should be adjusted (see also Ministry of Economic Affairs, 1997). A new line of more flexible. "tailor-made", spatial planning could be implemented in which a hierarchical structure of cities in the region (basically according to size) is kept, but allows - to some extent - for economic growth of promising industrial sectors, located in particular cities (see Figure 6.1 for a schematic illustration of this alternative of spatial planning).

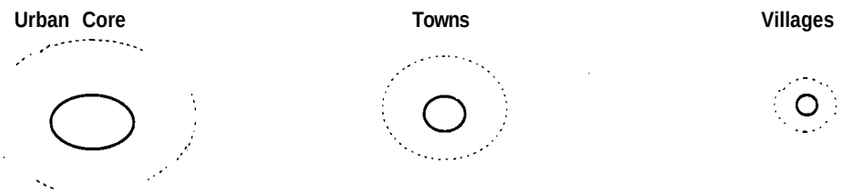


Figure 6.1 Scope for (limited) growth at various spatial level in the region

For example, a smaller town of which the local economy is specialized in synthetic products is allowed to accommodate growth in the synthetic sector either via the existing firms in that sector or through the entrance of new firms that are part of or highly related to the synthetic sector. Obviously, the scope for growth is limited by (environmental) sustainability conditions that ensure the quality of life in the surrounding of the town. An additional advantage of a more flexible spatial planning policy is that some smaller towns, in which market forces (e.g., due to the geographical location) clearly show that more space for housing and industrial sites is demanded, become capable to exploit these economic opportunities (at least to some extent).

Given the set of spatial-economic impulses in the four options presented in section 5 (see Table 5.1 and Table 5.2) and the (interactive) responses of the policy-makers discussed above, the appropriate policy action to be taken in the IJssel-Vecht Delta is to concentrate on option II in which endogenous industrial forces are "released" and option IV in which optimal use in made of the road-corridor (and complemented by facilitating other modes of transport). Hence, this synthesis of development strategy focuses primarily on the following economic impulses:

(1) the creation of a multimodal transport node (Zwolle-Kampen), together with the economic exploitation of the road-corridor (at a limited number of locations),

(2) the stimulation of industrial clustering (especially in SME's), located throughout the region.

Moreover. to favour the desired growth patterns, additional measures will be implemented in the synthesis strategy to improve the matching between the "human resources" of the region (e.g., via schooling and training), and the regional demand for labour. This implies that the educational system in the region "produces" school leavers whose abilities correspond with the requirements set by firms in important economic sectors in the region (industry, transport and distribution, commercial services, health and education). So, the third main impulse in the synthetic strategy consists of the enrichment of "human resources" in the region.

To let the public policy-makers reflect on the consequences of their own preferences, the interactive communication process is concluded by demonstrating the precise regional-economic effects of the synthetic-strategy to the group of policy-makers. For this purpose, we make use of a regional impact system' in which (mutual) relationships between the relevant aspects (demography, environment, housing and facilities) in the regional economy are taken into account (see Figure 6.2).

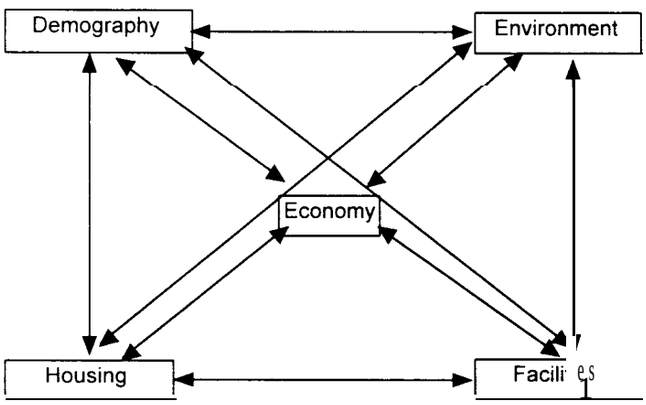


Figure 6.2 Regional impact system

[2] See for other applications of this method, for example, Nijkamp and Vreeker, 1998.

This regional impact system is used to assess the effects of the impulses that will be activated in the synthetic strategy on a set of pre-determined indicators. The following qualitative indicators are employed for the categories included in the system: demography, housing, environment, economy, and facilities (see Table 6.1).

Demography	Environment	Economy	Housing	Facilities
population size	diversity in neighbourhoods	employment growth (sectors)	quality of housing supply	discrepancies on market for educational services
	quality of life	labour market conditions (sectors)	housing market conditions	discrepancies on market for health services

Table 6.1 Indicators used in the regional impact system

As can be seen from the detailed results in Table 6.2, the impulses of the synthesis strategy have a positive impact on employment growth for the transport and distribution-sector, industrial- and construction-sector, commercial service sector and health and care-sector. In contrast, negative effects show up for the environmental indicators. The quality of life seems to be at risk, but in fact this danger is basically centred at a few specific locations, namely the industrial sites to be developed along the road-corridor. For some sectors (commercial services, industries and construction), tight regional labour markets are appraised to arise. The discrepancies on the markets for health and educational facilities are estimated to be reduced (due to measures taken to improve the matching of "human resources" in the region).

Economic impulses Estimated effects	Multimodal Node & Road-Corridor	Industrial Cluster	"Human Resources"	Total Effect
Demography				
population size	+	+/-	+/-	+
Housing				
market tightness	+/-	+/-	+/-	+/-
quality of supply	+/-	+/-	+/-	+/-
Environment				
diversity neighbourhood	+/-		+/-	
quality of life			+/-	..
Facilities'				
discrepancies-education	+/-	+	--	
discrepancies-health	+/-	+/-	--	--
Regional economy				
Transport and distribution:				
* employment growth	++	+	+/-	+++
* tightness labour market	+-I-	+/-		
Commercial services:				
* employment growth	+	+	+/-	+ +
* tightness labour market	+	+		+
Industries and construction:				
* employment growth	+/-	++	+/-	+++
* tightness labour market	+/-	++		+
Facilities (health and education):	+	+	+/-	+-/-
* employment growth	+/-	+/-	+/-	+/-
* tightness labour market				

able 6.2 Qualitative estimates of effects for the IJssel-Vecht Delta

*Note that a negative score means a favourable development: discrepancies between demand and supply on the market become less.

7. Conclusions

This paper highlighted the role of the experts in regional decision making on long-term economic development strategies. It has been elucidated that self-organising and learning principles for the region can be utilised to converge to an regional-economic development strategy in which the economic opportunities of the region are employed in concordance with the opinions of *both* experts and public-policy makers. A novel and fruitful factor in this interactive communication process between experts and public policy-makers was the extensive use of modem tools, especially the creation of the strategy on Internet and the correspondence on the desirability and feasibility of specific development paths via electronic mail. To conclude, the experts got on speaking terms with the public policy-makers through intensive interaction, thereby fully exploiting the regional knowledge capacity.

The application of this innovative approach to the IJssel-Vecht Delta in the province of Overijssel in the Netherlands led to the identification of the following regional-economic opportunities, to be employed in the development strategy: (i) the multimodal transport node in the urban core of the region, in conjunction with the road-corridor through the region that connects the core and periphery of the Netherlands. (ii) the industrial potential in SME's located throughout the region, to be further activated through intensified network building, and (iii) the regional abilities of "human resources", that is particularly manifest by means of the working attitude and the learning facilities. It was decided to give economic impulses to this selected set of focal points in order to fulfil the aim of public-policy makers to increase regional competitiveness such that, in the long run. the IJssel-Vecht Delta will do things better than other regions in the Netherlands. In accordance with the consensus seeking process, it was also concluded to set up an economic board with a few members from the private *and* public sector that will become fully responsible for the actual implementation of the policy actions as required by the selected regional-economic strategy for the IJVD region.

References

Allen, P., Cities as Self-Organising Complex Systems, *The City* and *Its Sciences,* (C.S.Bertuglia, G. Bianchi and A. Mela, eds.), Springer-Verlag, Berlin, 1998, pp. 95-144

Armstrong, H., and J. Taylor, *Regional Economics and Policy,* Second Edition, Harvester Wheatleaf, London, 1993

Chamber of Commerce (North-Overijssel), Vraaggestuurde Bedrijventerreinen Planning, BRO-report, 1997

Cheshire, P., and I. Gordon, *Territorial Competition in an Integrating Europe,* Avebury, Aldershot, 1995

Davelaar, E.J., *Incubation and Innovation,* Avebury, Aldershot, I99 l

Florida, R., Toward the Learning Region, *Futures, vol.* 15, pp. 527-536, 1995

Geenhuizen, M.S. van, and P. Nijkamp, The Local Environment as a Supportive Operator in Learning and Innovation, Research Paper, Dept. of Economics, Free University, Amsterdam, 1998

Kleinknecht. A.H. (ed.), *Determinants of innovation, The message from new indicators,* Macmillan/St. Martin's Press, London/New York, 1996

Knight, R.V., Knowledge-based Development, *Urban Studies, vol. 32,* pp. 225-260, 1995

Kohno, H., P. Nijkamp and J. Poot (eds.), *Regional Development in an Era of Globalization,* Edward Elgar, Cheltenham, UK, 1999

Kutsch Lojenga. F.J. and P. Nijkamp. De plaats van de IJssel-Vechtdelta in het na-oorlogse ruimtelijke beleid, *Bijdragen uit het land van IJssel en Vecht* (P.J. Ente, J. van Gelderen, J. Kamphuis and H.A.H. Reinders, eds.), Uitgeverij Waanders, Zwolle, 1978

Ministry of Economic Affairs, Ruimte voor Economische Dynamiek, 1997

Nijkamp. P., and A. Reggiani, *The Economics of Complex Spatial Systems,* Elsevier, Amsterdam, 1998

Nijkamp. P.. and R. Vreeker, Sustainability Assessment of Development Scenarios: Methodology and Application to Thailand, TI Discussion Paper TI 98-018 13, Tinbergen Institute, Amsterdam, 1998.

Porter. M.. *The Competitive Advantage of Nations,* Free Press, New York, 1994

Ratti. R.. A. Bramanti and Gordon. R. (eds.), *The Dynamics of Innovative Regions,* Ashgate, Aldershot, 1997

Stichting Economisch Onderzoek (SEO), Steden en stadsgewesten, Economische ontwikkelingen 1970-2015, Amsterdam, 1996

Storper. M., The Resurgence of Regional Economies, *European Urban & Regional Studies, vol. 2,* pp. 191-221, 1995